United States Environmental Protection Agency

Region 10 Emergency Response Unit

POLLUTION REPORT

I. HEADING

Date: October 6, 2001
Subject: Industrial Chrome Plating
From: Dan Heister, OSC, USEPA, Region 10, Emergency Response Unit
Tel: Office (503) 326-6869
TO: See Distribution List on last page

POLREP No.6

II. BACKGROUND

Site ID: 8P
Delivery Order No: E-01-001
Response Authority: CERCLA
FPN No: 987175064
NPL Status: NA
State Notification: Oregon Department of Environmental Quality
Action Memo Status: August 2001
Removal Start Date: August 27, 2001
Expected Completion Date: October 2001

III. SITE INFORMATION

A. Incident Category

Fund-Lead Removal Action

B. Site Description

1. Site Location

The Industrial Chrome Plating site is located in a mostly residential neighborhood on the southeast corner of NE 62nd Avenue and NE Hassalo Street in Portland, Oregon. The Portland Rifle Club and Deluxe Fuel are west of the site; an empty lot is to the east. The southern boundary of the property borders the City of Portland's Tri-Met transportation railroad track and Interstate Highway 84, which are in a swale known as Sullivan Gulch. The site consists of a main

building and an outside storage area on 0.27 acres. A storage lot to the east of the property (with cars and trailers) that has been impacted by the facility's operations is an additional quarter acre. The main building is separated into two parts: the northern portion and the southern portion. Most of the plating tanks are in the northern portion, while the southern portion contains a few smaller plating tanks and an area set aside for buffing and polishing parts. A small office is in the northwest corner of the building. The south side of the property has an asphalt driveway, a small patch of grass, and a large cellular communications tower. The southern portion of the property is fenced. Immediately south of the fence the terrain slopes steeply down for 15 to 20 feet into Sullivan Gulch and railroad tracks. Runoff water from the site flows to the gulch and railroad tracks, and access is unrestricted. The empty lot to the east of the site is fully fenced and contains a large advertisement billboard, and some parked trailers and boats. The east property boundary is fenced at the south end of the property and the building wall makes up the north end. Areas of gravel and broken asphalt make up a ten foot wide strip between the property and NE 62nd Avenue. On the west side of 62nd Avenue is the Portland Gun Club to the north and Deluxe Fuel to the south. North of the site is a residential neighborhood. Three houses are located directly across the street and one on the opposite corner of NE Hassalo and NE 62nd Avenue.

C. Assessment Results

In March of 1999, the EPA tasked Ecology and Environment Inc. (E & E) Superfund Technical Assessment and Response Team (START), to assess the risks associated with the Industrial Chrome Site. An integrated assessment of the site was conducted which identified elevated concentrations of chromium and lead at depth and in the surface of a majority of the samples. Based on the analytical results from this sampling event, the EPA tasked Ecology and Environment, Inc. to conduct a removal assessment at the ICP site to determine the full extent of surface and subsurface contamination both on and surrounding the ICP property.

Removal assessment results indicated the presence of hexavalent chromium in the surface soil contamination on the south and east sides of the building. Subsurface soil contamination is concentrated in the first ten feet on the south and east sides of the building. However, in the vicinity of the dry well (southeast of the building), significant subsurface soil contamination extends to a depth of at least 30 feet bgs, and subsurface soil. Subsurface soil samples collected from beneath the building also contained significant levels of contamination. Assessment of subsurface contamination west and south of the buildings was incomplete because overhead and subsurface utilities interfered with access to this area.

Many detections of lead in samples collected on the ICP property exceed Region 9 Preliminary Remediation Goals and/or Oregon Cleanup Levels.

Six people worked at the site until it voluntarily ceased operations in August 2001. The site is located in a mixed commercial/industrial and residential neighborhood with homes as little as 100 feet from the property to the north. Access to the site is not completely restricted, thereby increasing the potential for humans and animals to come in contact with contaminants. Soils to the south and east of the ICP building are fenced, preventing access to the area. Some of this area is capped with grass or asphalt; however, most of the contaminated area is exposed soil. Access to contaminated soils on the north and west side of the building is unrestricted. Soils on surrounding residential properties do not contain chromium above regulatory levels.

The possibility for off-site migration of chromium and lead, specifically via direct exposure to soil, particulates, surface water runoff, and groundwater can be reduced only if contaminated surface and subsurface soils at the site are removed or immobilized.

In August 2001, EPA obligated funds to conduct a removal of the soil contamination at the Industrial Chrome site which will involve: razing the building; excavating and properly disposing of contaminated soil and debris; and restoring the property so that it may be used in the future.

IV. Removal Activities

A. Situation

1. Current Situation

October 1, 2001 (Monday)
Personnel on site: START (1), ERRS (6), USCG(1), Qwest (2).
Weather: Partly cloudy with a high of 80°F expected.

STM shows the two representatives from Qwest wireless (David Rummell and Terry Church) the area where high levels of contamination were observed and screened with the XRF near the utility lines that supply the Qwest tower. Church states that the lines should be buried three feet and protected with schedule 40 PVC. They are aware of the need to remove the maximum amount of contamination around the lines and understand that excavation will occur within a foot of the lines. Rummell states that Qwest

will prepare a memorandum stating their knowledge and acceptance of the excavation activities.

ERRS moves the southern fence at the site 20 feet outward (to the south) so that excavated material may be stockpiled in this area to alleviate congestion and the lack of storage area on the eastern lot. This will allow for the eventual excavation to occur on the eastern lot. The southern area is covered with plastic sheeting and additional fence is installed to encompass the larger area. Loading of contaminated soil will now occur from the southwest corner of the site.

October 2, 2001 (Tuesday)
Personnel on site: START(1), EPA(1), EQM (6), USCG (2).
Weather: Light rain with a high of 78° F expected.

ERRS continues to stage soils from the east lot to the southern portion of the site.

Jeff McMillen's (USCG) replacement, Tom Dammann, has arrived at the site and both will be present for one day while Dammann becomes familiar with the site. Tom's duties will be to ensure that all site safety concerns are addressed and to act as the federal representative in the OSC's absence.

A sample of the backfill material has been obtained from Glacier Northwest. A sample will be obtained to ensure that the material is free of chemical contamination. As required under the E & E engineering design for the backfill and asphalt cap, a sieve test and modified proctor test will be obtained by an independent laboratory to verify the granular size by percentage of the source material and determine the optimal compaction and moisture content.

October 3, 2001 (Wednesday)
Personnel on site: START (1), EQM (6), EPA (1), USCG (1).
Weather: Cloudy skies with a high of 75°F expected.

The ERRS crew is excavating the eastern portion of the property to a depth of 2.5 feet where it appears contamination tapers off, although additional excavation may be required as some debris is observed in a few locations. The material is stockpiled in the eastern lot area (SP1100) as the contamination appears to be at lower levels (than the facility area) and might pass TCLP.

A concrete septic well is discovered in the southern portion of the eastern lot. It appears to have a total depth of 10 feet (8 feet open, 2 feet of

sludge). A pipe enters the side of the well from the northwest (the direction of the former plating facility) and the inner sides of the well are stained. START and USCG sample the material at the bottom of the well with a PVC pipe and screen the sludge sample with the XRF. High levels of chromium are present in the sample. ERRS elects to postpone the excavation of the septic well until later in the removal.

October 4, 2001 (Thursday)
Personnel on site: START(1), EPA (1), USCG(1), EQM (6).
Weather: Clear skies with a high in the upper 60s expected.

EQM crew excavates additional soils along the western portion of the eastern RV lot. After excavating the initial three feet of soil below ground surface (bgs), the XRF is utilized to screen the soils in situ. Results indicate that additional excavation of the east lot will be required. The initial three feet is stockpiled separately as the soil is likely to pass the TCLP regulatory requirements based on screening concentrations. The resulting stockpile (SP1200) is sampled and submitted for analysis.

An additional five loads of soil are transported from the site to USEI.

October 5, 2001 (Friday)
Personnel on site: EQM (6), START (1), EPA (2), USCG(1).
Weather: Sunny skies with a high of 72°F expected.

Additional soils are excavated from the western portion of the eastern lot. The depth of excavation reaches 8 feet bgs before screening results indicate the soils are below the action level for chromium (1,000 ppm). The soil is stockpiled (SP1300) and sampled separately as the concentrations (and matrix) are different from those previously excavated.
ERRS also continues to excavate near the dry well on the ICP facility property and under the dipping tanks where gross contamination exists.

October 6, 2001 (Saturday)
Personnel on site: EQM (6), EPA (), USCG(1).
Weather: Partly cloudy skies with a high of 70°F expected.

The primary objective is to load 8 trucks for transport of hazardous waste to the USEI facility in order to clear space along the southern boundary of the property for additional soils that will be excavated. The crew works a half day to complete this task and to cover the exposed pit to prevent precipitation from driving contaminants vertically.

2. Removal Actions to Date

All loads of contaminated soil were delivered this week to a RCRA Subtitle C landfill in Grand View, Idaho (US Ecology Idaho).

October 1, 2001

Type	Quantity	Location Where Taken
Soil	6 truckloads	U.S. Ecology of Idaho (Grand View, Idaho)

October 2, 2001

Type	Quantity	Location Where Taken
Soil	7 truckloads	U.S. Ecology of Idaho (Grand View, Idaho)

October 3, 2001

Type	Quantity	Location Where Taken
Soil	6 truckloads	U.S. Ecology of Idaho (USEI) (Grand View, Idaho)

October 4, 2001

Type	Quantity	Location Where Taken
Soil	5 truckloads	U.S. Ecology of Idaho (USEI) (Grand View, Idaho)

October 5, 2001

Type	Quantity	Location Where Taken
Soil	6 truckloads	U.S. Ecology of Idaho (USEI) (Grand View, Idaho)

October 6, 2001

Type	Quantity	Location Where Taken
Soil	8 loads	U.S. Ecology of Idaho (USEI) (Grand View, Idaho)

3. Enforcement

Enforcement actions are being reviewed at this time by EPA.

B. Planned Removal Activities

The removal action will involve the excavation of the majority of soil contamination at the site. Clean backfill will replace the excavated soils and an impenetrable asphalt cap will be installed to prevent precipitation from migrating through the site soils.

The cap will also direct surface water away from the site to municipal storm drains.

C. Next Steps

EPA and E&E to continue to conduct soil sampling, air sampling, X-Ray Fluorescence metals screening, submittal of confirmation samples, and site documentation for the removal action until completion.

V. Cost Information

Estimated costs are summarized below:

	Established Ceiling	Estimated Costs (as of 9/22/01)
EPA	$37,000	$13,500
START	$180,000	$90,000
ERRS	$1,200,000	$512,000
Total	$1,417,000	$615,500

Note: The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

VI Disposition of Wastes

Contaminated soil has been transported to the Waste Management Hillsboro Landfill in Hillsboro, Oregon, and the U.S. Ecology of Idaho facility in Grand View, Idaho. Additional disposal facilities may be utilized to remove all of the wastes.

Hazardous liquid wastes and building debris were removed from the site during the first two weeks of the removal action. The liquids were transported to Burlington Environmental in Tacoma, Washington for proper disposal. The building debris was delivered to the Roosevelt Regional Landfill in Roosevelt, Washington. Some solvents (acetone) remain in six 55-gallon drums awaiting proper disposal.

VII Distribution

To: Terry Eby, EPA Headquarters
Chris Field, Mary Matthews, OSCs, EPA Region 10 Emergency Response Unit
Oregon Department of Environmental Quality, Attention: Chuck Donaldson, Emergency Response
EPA Oregon Office, Attention: Dan Opalski

VII Status

Site actions continue.